



ENVIRONMENTAL STEWARDSHIP DEPARTMENT/
NEW BEDFORD CONSERVATION COMMISSION

CITY OF NEW BEDFORD
SCOTT W. LANG, MAYOR

September 16, 2009

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
1 Congress Street, Suite 1100 - CPT
Boston, MA 02114-2023

RE: Polychlorinated Biphenyl (PCB) Remediation Notification
Related to Residential Building Demolition and Foundation Management
City of New Bedford
101, 102, and 111 Greenwood Street, and 98, 108, and 118 Ruggles Street
New Bedford, Massachusetts 02740

Dear Ms. Tisa:

This letter serves as notification to the United States Environmental Protection Agency (USEPA) that the City of New Bedford (City) is prepared to commence on-site activities related to building demolition at the above mentioned residential locations. The City views the proposed building demolition activities as an interim step toward the implementation of a full remedy for the subject parcels, currently in the planning stage, which will be the subject of subsequent regulatory submittals to the EPA and the Massachusetts Department of Environmental Protection (MassDEP).

The demolition activities were described in the Release Abatement Measure (RAM) Plan prepared by TRC Environmental Corporation (TRC) and submitted to MassDEP on September 9, 2009. That information has been modified by the proposed activities and information provided herein. These changes are in turn reflected in the Modified RAM Plan that will be submitted to MassDEP upon obtaining concurrence from EPA on this letter/notification (a draft of the Modified RAM Plan has been provided to EPA for coordination purposes). The modified RAM plan will be a stand alone document that replaces the September 9, 2009 RAM Plan in its entirety.

The City's knowledge of the nature and extent of soil contamination on these properties is based on technical reports prepared by The BETA Group, Incorporated (BETA) and TRC Environmental Corporation (TRC), specifically:

- *Summary of Analytical Data Volumes I and II, Properties Located on: Greenwood Streets, Ruggles Street, Durfee Street, New Bedford, Massachusetts.* Prepared by BETA Group, Inc., March 15, 2006.
- *Summary of Analytical Data 102 Greenwood Street, New Bedford, Massachusetts.* Prepared by BETA Group, Inc., September 14, 2006.
- *Data Summary Report, 102 Greenwood Street, New Bedford, Massachusetts.* Prepared by TRC Environmental Corporation, July 2008.

The specific activities for which the City seeks EPA's concurrence are as follows:

- Management of concrete foundation materials subject to demolition that may be in contact with potential polychlorinated biphenyl (PCB) contaminated soil that may constitute PCB Remediation Waste; and
- Sampling to evaluate the potential impact of the presence of potential PCB contaminated soil that may constitute PCB Remediation Waste on the regulatory status and management procedures for the foundation materials.

Source removal associated with soil is not proposed at this time, nor is source removal associated with the concrete foundation materials. The plan is to re-use the concrete foundation materials, which will be appropriately processed per long-standing MassDEP policy and as further outlined in the Modified RAM Plan. Small amounts of soil disturbance may take place associated with foundation management and the disconnection of buried utility lines for public safety purposes, but no removal of soil will take place at this time. Any source removal associated with any potential PCB contaminated soil and/or concrete foundation material (if needed/required) that may constitute a PCB Remediation Waste would be addressed in subsequent regulatory submittals as overall remediation activity progresses.

This letter also provides clarification regarding dust monitoring and the decontamination of certain pieces of equipment utilized in the demolition activity, as well as the management of the above-ground swimming pool at 102 Greenwood Street and any other miscellaneous structures that might be present on the properties (e.g., sheds).

Background

The purpose of the modified RAM Plan is to outline the anticipated construction activities (demolition of dwellings at six properties) that will be undertaken by the City at the 101, 102, and 111 Greenwood Street, and 98, 108, and 118 Ruggles Street (hereinafter "Acquired Residential Properties") portion of the Parker Street Waste Site (PSWS) located on the eastern end of Greenwood and Ruggles Streets near or at the intersection of Hathaway Boulevard in New Bedford, Massachusetts.

The construction activities are anticipated to include the installation of a perimeter fence, excavation and immediate replacement of soils to allow for the disconnection of underground dwelling utilities (this does not involve the removal of soil from the properties), demolition of the dwelling structures and disposal of the dwelling debris, demolition and subsequent management of the concrete foundations to a location at or below grade, breaking of the basement slabs to enable drainage, and backfilling of the basement space and/or covering the remaining concrete slab with crushed concrete foundation materials and suitable off-site soil material installed in 1 to 2 foot lifts and establishment of grass cover on an additional 3 to 4 inches of loam. These activities constitute an interim step toward the implementation of a full remedy for the subject parcels that will stabilize this portion of the site in advance of anticipated redevelopment of the properties and eventual regulatory closure. One of the objectives of this RAM Plan is to describe measures that will be taken to minimize soil disturbance to the extent practicable and mitigate potential fugitive dust generation. The City does not plan to remove any soil from the Acquired Residential Properties at this time. Leading up to this

effort, the City performed abatement work to remove hazardous materials identified within the structures including asbestos containing materials, miscellaneous containers of fluids left behind by the former residents, mercury thermostats, and other household items or items associated with the materials of construction.

Technical Approach

The City understands that it is EPA's position that some of the activities related to the above-mentioned demolition activities may be jurisdictional under the EPA's PCB regulations under 40 CFR Part 761. The following information for the six residential properties slated for demolition is provided to facilitate EPA's evaluation of regulatory applicability, particularly with regard to the applicability of the definition of PCB Remediation Waste under 40 CFR Part 761.3.

Location	Number of PCB soil samples	Number of soil samples >50 mg/kg	Max. PCB Conc. (mg/kg)	Depth Detected (feet)	Last Date of Parcel Ownership by City*	Date of Residence Construction
98 Ruggles St.	27	0	13.3	7-10	1954	2000
108 Ruggles St.	75	0	10.33	3-6	1954	2000
118 Ruggles St.	20	1	59.1	2.75-4	1941 1992-1993**	1988
101 Greenwood St.	68	1	976	3-6	1949	2000
102 Greenwood St.	49	1	68.3	2	N/A	1986
111 Greenwood St.	67	0	1.668	3	1949	1965

*. Before the City's recent re-acquisition of the parcels in 2008.

** Tax title issues in 1992/1993. The parcel was developed by others as a residence by that time.

N/A – Not applicable. Not in chain of title until acquisition by the City in 2008.

Based on the above information, three of properties each have single detections of PCB soil concentrations in excess of 50 mg/kg (shown in bold face in the above-presented table): 118 Ruggles Street, 101 Greenwood Street, and 102 Greenwood Street. In addition, historical information such as the timeframe for approval and construction of the New Bedford High School (i.e., late 1960s – early 1970s), and thus the closure of the dump, and a detailed review of ownership records, aerial photographs, newspaper articles, historical maps, and a variety of City records indicate that PSWS-related waste disposal activities took place between 1950 and 1954, and that waste disposal activity in the wider PSWS impacted area ceased in the early 1960s. The construction date of the house at 102 Greenwood Street (1965), evidence indicating cessation of waste deposition activity in the early 1960s, and the absence of post-1978 ownership of the Acquired Properties by the City (with the exception of one tax title incident for the residence at 118 Ruggles Street in 1992/1993 and the City's purposeful acquisition of the parcels to facilitate remedial management in 2008) suggest that waste deposition from the PSWS source concluded prior to 1978. Based on these lines of evidence, it is the City's position that the only the contaminated soil at 118 Ruggles Street, 101 Greenwood Street, and 102 Greenwood Street qualify to be regulated as PCB Remediation Waste at this time.

To evaluate if the portions of the foundation in contact with soil and subject to demolition and subsequent management have been impacted by contact with any potential PCB contaminated soil that may constitute a PCB Remediation Waste leading to regulation of foundation materials at those parcels as a PCB Remediation Waste, the City's

environmental contractor will collect samples of concrete at a frequency of one for every ten feet of foundation perimeter in contact with potentially contaminated soil at the 3 residences where PCBs were detected in excess of 50 mg/kg in soil (i.e., 118 Ruggles Street, 101 Greenwood Street, and 102 Greenwood Street). Foundation perimeters for the subject residences range from 112 feet to 128 feet, with an average perimeter of approximately 120 feet. Twelve concrete samples (exclusive of quality control samples) will be collected for PCB Aroclor analysis (SW-846 Method 8082) from each of these residences following the removal of soil particles using conventional dry brushing techniques.

Clarification Regarding Dust Monitoring

Air monitoring will be performed using a combination of real-time dust monitoring upwind and downwind of the work area during building demolition, foundation removal, basement slab breaking, and backfilling activities.

During the excavation for utility disconnection, a minimum amount of soil disturbance is anticipated and may not require dust monitoring. Nonetheless, when potentially contaminated soils are encountered during RAM-related contaminated soil excavation and management activities, and during building demolition, foundation removal, basement slab breaking, and backfilling activities, real-time field screening of breathing zone dust levels will be conducted using direct reading instruments that are designed to monitor air quality on a real-time basis. A second instrument will be used to monitor dust levels downwind of the excavation, while a third instrument will be used to monitor dust levels between the work zone and the nearest property (e.g., residence, school, etc.) regardless of the wind direction.

As set forth in the RAM Plan, the dust monitoring units will be TSI Dustrak™ units, or equivalent, equipment with size-selective inlet for particles of 10 micrometers in diameter or less (PM₁₀). Background samples will be collected for at least 15 minutes at each location prior to the start of site activities. The continuous dust monitor uses a light scattering photometer to quantify particles and converts the counts to a concentration in units of milligrams per cubic meter (mg/m³). This instrumentation has an accuracy of 0.001 mg/m³ (1 ug/m³). The dust monitoring instruments will be placed in weatherproof cases with an omni-directional probe to minimize wind interference. The dust monitoring instruments will be zeroed daily before use and at the end of the day. Data will be logged at 60-second intervals and will be monitored periodically by field personnel during RAM-related excavation activities. Data will be downloaded daily.

If sustained ambient dust levels exceed the EPA National Ambient Air Quality Standard (NAAQS) of 150 µg/m³ at a downwind sampling location and/or at a location between the work zone and the nearest property (a sustained reading would consist of a reading lasting 15 minutes or longer), then dust suppression activities will be increased with a greater usage of water sprays.

The modeling conducted to support the derivation of the 150 µg/m³ dust level indicates that the PCB concentration would need to be at least 2,000 mg/kg in soil or concrete before the EPA Acceptable Long-Term Average Exposure Concentration of 0.3 ug/m³ employed for Keith Middle School (KMS) and New Bedford High School (NBHS)

indoor air monitoring is exceeded. This assumes the PCB concentration is a uniform 2,000 mg/kg and the dust level is sustained. The assumptions and concentration basis are both very conservative; therefore, the action level for real-time dust monitoring is expected to be protective, especially over the short duration of the planned work.

Above-Ground Swimming Pool or Other Miscellaneous Aboveground Structures

The above-ground swimming pool and other miscellaneous aboveground structures will be dismantled and disposed of as solid waste. Pool liner and structure components in contact with potentially contaminated soil that is potentially regulated as a PCB remediation waste will be managed in accordance with 40 CFR Part 761.61(a)(5)(ii) and sampled in accordance with 40 CFR Part 761, Subpart P.

Equipment Decontamination

Equipment that comes into direct contact with soil or concrete determined to be actual or potential PCB Remediation Waste will be decontaminated by one of the following methods:

- Self-Implementing Decontamination Procedures, as set forth under 40 CFR Part 761.79(c); or
- Aqueous cleaning followed by verification sampling as set forth under 40 CFR Part 761, Subpart P.

Certification Pursuant to 40 CFR §761.61(a)(3)(i)(E)

I certify that all sampling plans, sample collection procedures, sample preparation procedures, extraction procedures, and instrumental/chemical analysis procedures used to assess or characterize the PCB contamination at the above referenced cleanup site, are on file at the offices of TRC Environmental Corporation, Wannalancit Mills, 650 Suffolk Street, Lowell, Massachusetts, and are available for EPA inspection.

If you have any questions, please call me at 508-991-6188.

Very Truly Yours,



Scott Alfonse
Director

cc: Molly Cote, Massachusetts Department of Environmental Protection (by electronic PDF)
David M. Sullivan, LSP, CHMM; TRC (by electronic PDF)
David J. Fredette, P.E.; City of New Bedford (by electronic PDF)